



PAT MCCRORY
Governor

DONALD R. VAN DER VAART
Secretary

SHEILA C. HOLMAN
Director

February XX, 2017

Timothy Kiser
Engineering Director
WSACC – Rocky River Regional WWTP
P.O. Box 428
Concord, NC 28025

SUBJECT: Air Quality Permit No. 04475T20
Facility ID: 1300002
WSACC – Rocky River Regional WWTP
Concord, Cabarrus County, North Carolina
Permit Class: Title V
PSD Class: Minor

Dear Mr. Kiser:

In accordance with your completed Air Quality Permit Application for a 1st Time Title V permit received March 14, 2014, we are forwarding herewith Air Quality Permit No. 04475T20 to WSACC – Rocky River Regional WWTP, Concord, Cabarrus County, North Carolina authorizing the continued operation of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641.

The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215-108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of GS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in GS 143-215.114A and 143-215.114B.

Cabarrus County has triggered increment tracking under PSD for PM-10 and SO₂. However, this permit modification does not consume or expand increments for any pollutants.

This Air Quality Permit shall be effective from February XX, 2017 until January 31, 2022, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

Should you have any questions concerning this matter, please contact Lori Ann Phillips at (919) 707-8461 or lori.phillips@ncdenr.gov.

Sincerely yours,

William D. Willets, P.E., Chief, Permitting Section
Division of Air Quality, NCDEQ

Enclosure

c: Heather Ceron, EPA Region 4
Mooresville Regional Office
Central Files

ATTACHMENT to Permit No. 04475T20

Insignificant Activities per 15A NCAC 02Q .0503(8)

Emission Source ID No.	Emission Source Description
I-1	No. 2 fuel oil/recycled No. 2 fuel oil-fired boiler (2.5 million Btu per hour maximum heat input capacity) – GACT Subpart JJJJJ
I-2	Wastewater treatment plant odor control system consisting of a 2-stage scrubber using sodium hypochlorite and sodium hydroxide
I-3	Paint spray booth
I-4	No. 2 fuel oil/recycled No. 2 fuel oil-fired space heater (0.25 million Btu per hour maximum heat input capacity)
I-5	No. 2 fuel oil/recycled No. 2 fuel oil-fired space heater (0.25 million Btu per hour maximum heat input capacity)

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the Permittee is exempted from demonstrating compliance with any applicable requirement.
2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 “Control of Toxic Air Pollutants” or 02Q .0711 “Emission Rates Requiring a Permit”.
3. For additional information regarding the applicability of MACT or GACT see the DAQ page titled “The Regulatory Guide for Insignificant Activities/Permits Exempt Activities”. The link to this site is as follows: <http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide>.

Summary of Changes to Permit

The following changes were made to the WSACC – Rocky River Regional WWTP Air Permit No. 04475T20:

Page No.	Section	Description of Changes
Cover and throughout	All	Updated all dates and permit revision numbers. Converted permit format from a State permit to a Title V permit.
N/A	N/A	Removed the Synthetic Minor permit stipulation and associated operation restrictions, recordkeeping requirements, and reporting requirements.
N/A	N/A	Removed 15A NCAC 02D .0605, as this permit condition is found in Section JJ of the General Conditions.
14	2.1.B.3	Updated the 15A NCAC 02D .1111 Subpart ZZZZ permit placeholder to the most current permit stipulation.
N/A	N/A	Removed 15A NCAC 02D .1806 Odor Control Requirements as wastewater treatment plants are exempt from this rule.
N/A	N/A	Removed 15A NCAC 02D .1100 (Toxics Emissions Limitations and Reporting Requirement) and 15A NCAC 02Q .0317 (Vendor Supplied Recycled Fuel Oil Requirements) as the incinerator is subject to Part 61 NESHAP and this exempts it from air toxics permitting in accordance with 15A NCAC 02Q .0702(a)(27)A).
N/A	N/A	Removed the CO oxidation catalyst (Control Device ID No. 5) from the equipment list.
N/A	N/A	Removed the BACT SB3 permit stipulation, as this pertained to the waste heat recovery generation system that began operation at the facility in December 2014 and was decommissioned due to failure of the system in May 2016.
3 and throughout	Section 1 Table and throughout	Added “ES” or “CD” to the beginning of emission source and control device ID numbers for consistency.
8	2.1A.10	Replaced the Federal Plan Subpart LLL placeholder stipulation with the detailed permit stipulation.
7	2.1A.5	Updated 15A NCAC 02D .1204 to add operational parameters obtained through performance testing.
3	Section 1 Table	Changed the emission source description for ES-G-1 to read “No. 2 fuel oil-fired” instead of “Diesel-fired” to maintain consistency throughout DAQ permits.
3	Section 1 Table	Updated the control device description for CD-06 to show the minimum liquid injection rate of 155 gallons per minute and a minimum pH of 4.67 as established through performance testing conducted on March 15-16, 2016.



State of North Carolina
Department of Environmental Quality
Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
04475T20	04475R19	February XX, 2017	January 31, 2022

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 2D and 2Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 2Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee: **WSACC – Rocky River Regional WWTP**

Facility ID: **1300002**

Facility Site Location: **6400 Breezy Lane**
City, County, State, Zip: **Concord, Cabarrus County, North Carolina 28205**

Mailing Address: **P.O. Box 428**
City, State, Zip: **Concord, Cabarrus County, North Carolina 28025**

Application Number: **1300002.14A**
Complete Application Date: **March 14, 2014**

Primary SIC Code: **4952**
Division of Air Quality,
Regional Office Address: **Mooresville Regional Office**
610 East Center Avenue, Suite 301
Mooresville, NC 28115

Permit issued this the XXth day of February, 2017.

William D. Willets, P.E., Chief, Air Permitting Section
By Authority of the Environmental Management Commission

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SECTION 1 - PERMITTED EMISSION SOURCES AND ASSOCIATED AIR POLLUTION CONTROL DEVICES AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
3, 18	ES-01 (NSPS, NESHAP, FP)	Sewage sludge multiple hearth incinerator (22.25 feet in diameter, with a maximum average permitted charging rate of 21,200 wet pounds per hour) fired by twelve (12) No. 2 fuel oil/recycled No. 2 fuel oil-fired burners (18.8 million Btu per hour total heat input rating)	CD-03 CD-04 CD-06 CD-02	No. 2 fuel oil-fired afterburner (7.77 million Btu per hour maximum burner rating) Conditioning system consisting of a spray quencher and two-tray impingement cooler Packed tower scrubber (155 gallons per minute minimum liquid injection rate and a minimum pH of 4.67) Wet electrostatic precipitator (2,439 square feet of collector plate area)
14, 18	ES-G-1 (MACT)	2,000 kW No. 2 fuel oil-fired emergency generator (20.16 million Btu per hour maximum heat input)	N/A	N/A

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

2.1 - Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission sources and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

A. One sewage sludge multiple hearth incinerator (22.25 feet in diameter, with a maximum average permitted charging rate of 21,200 wet pounds per hour) fired by twelve (12) No. 2 fuel oil/recycled No. 2 fuel oil-fired burners (18.8 million Btu per hour total heat input rating)) (ID No. ES-01) controlled by No. 2 fuel oil-fired afterburner (ID No. CD-02, 7.77 million Btu per hour maximum burner rating), conditioning system consisting of a spray quencher and two-tray impingement cooler (ID No. CD-04), packed tower scrubber (ID No. CD-06, 155 gallons per minute minimum liquid injection rate and a minimum pH of 4.67), and wet electrostatic precipitator (ID No. CD-02, 2,439 square feet of collector plate area).

The following provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million Btu heat input each	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Particulate matter	1.3 pounds per ton of dry sludge input	15A NCAC 02D .0524
Visible emissions	20 percent opacity	Subpart O
Beryllium	0.022 pounds per 24-hour period	15A NCAC 02D .1110
Mercury	7.1 pounds per 24-hour period	NESHAP Subparts C & E
Particulate matter	1.3 pounds per ton of dry sludge input	15A NCAC 02D .1204
Visible emissions	20% opacity	
SO ₂	2.3 pounds per million Btu	
Odorous emissions	As per 15A NCAC 02D .1806	
HCl	4 pounds per hour	
Hg	As per 15A NCAC 02D .1110	
Beryllium	As per 15A NCAC 02D .1110	
Toxic air pollutants	As per 15A NCAC 02D .1100	
Total hydrocarbons	100 parts per million (volumetric basis, corrected to 7% oxygen and 0% moisture)	
CO	250 tons per year	15A NCAC 02Q .0317
SO ₂	See Section 2.2.A	PSD Avoidance
PM ₁₀		
Beryllium, Hg, As, Cd, Cr, Pb, Ni	Monitor concentrations of metals in off-site sludge	15A NCAC 02Q .0508
Pb, As, Cd, Cr, Ni	40 CFR 503.43(c), Continuous emission monitoring quality assurance reporting	40 CFR Part 503, Subpart E 15A NCAC 02D .0613
Cd, CO, HCl, Hg, NO _x , Pb, PCDD/PCDF, PM, SO ₂ , fugitive emissions	40 CFR Part 62, Subpart LLL	40 CFR Part 62, Subpart LLL

1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from this source (**ID No. ES-01**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the burning of No. 2 fuel oil in this source (**ID No. ES-01**).

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from this source (**ID No. ES-01**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent

opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in **Section 2.1 A.2.a.** above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of No. 2 fuel oil in this source (**ID No. ES-01**).

3. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS SUBPART O

- a. For the sewage sludge incinerator (**ID No. ES-01**), the Permittee shall comply with all applicable provisions for emissions standards, compliance and performance testing, emission monitoring, and reporting and recordkeeping, in accordance with 15A NCAC 02D .0524 “New Source Performance Standards (NSPS)” as promulgated in 40 CFR 60, Subpart O “Standards of Performance for Sewage Treatment Plants”, including Subpart A “General Provisions.”

NSPS Emissions Limitations [§60.152]

- b. The following permit limits shall not be exceeded:

Affected Source(s)	Pollutant	Emissions Limit
Sewage sludge multiple hearth incinerator (22.25 feet in diameter, with a maximum average permitted charging rate of 21,200 wet pounds per hour) fired by twelve (12) No. 2 fuel oil/recycled No. 2 fuel oil-fired burners(18.8 million Btu per hour total heat input rating) (ID No. ES-01)	Particulate Matter	1.3 pounds per ton of dry sludge input
	Visible Emissions	Less than 20 percent opacity

PM – Control Device Requirements

- c. As required by 15A NCAC 2D .0524, particulate matter emissions from the multiple hearth sewage sludge incinerator (**ID No. ES-01**) shall be controlled as described in the permitted equipment list.
- i. **Inspection and Maintenance Requirements** - To comply with the provisions of this Permit and ensure that optimum control efficiency is maintained, the Permittee shall establish a documented inspection and maintenance schedule/checklist based on the manufacturer’s recommendations for the conditioning system, the packed tower scrubber, and the wet electrostatic precipitator (WESP).
 - ii. **Monitoring Requirements** - The Permittee shall ensure the proper performance of the conditioning system, packed tower scrubber, and WESP by monitoring as a minimum the following operational parameters as measured on a continuous basis:
 - A. For the conditioning system (**ID No. CD-04**), the average daily water flow rate to the quencher shall not be less than 198 gallons per minute and to the cooler 599 gallons per minute. The average is defined by the total actual daily water flow rate to the quencher and cooler divided by the actual daily hours of operation while sludge is being charged. A day shall be defined from 12:00 am to 11:59 pm.
 - B. For the packed tower scrubber (**ID No. CD-06**), the average daily liquid injection rate to the scrubber shall not be less than 155 gallons per minute. The average is defined by the total actual daily water flow rate to the quencher and cooler divided by the actual daily hours of operation while sludge is being charged. A day shall be defined from 12:00 am to 11:59 pm.
 - C. For the WESP (**ID No. CD-02**), the minimum average daily power input measured on the secondary side of the transformer shall not be less than 169.99 Watts. The average is defined by the product of the voltage and amperage readings, while sludge is being charged, divided by the number of voltage readings performed each day. A day shall be defined from 12:00 am to 11:59 pm.
 - iii. **Recordkeeping Requirements** - The results of inspections, maintenance, and monitoring shall be documented in a logbook (written or electronic form), kept on site, and made available to an authorized representative upon request. The logbook shall record the following:

- A. For the conditioning system (**ID No. CD-04**), the average daily water flow rate to the quencher and cooler. The average is defined by the total actual daily wet water flow rate to the quencher and cooler divided by the actual daily hours of operation while sludge is being charged. A day shall be defined from 12:00 am to 11:59 pm.
 - B. For the packed tower scrubber (**ID No. CD-06**), the average daily liquid injection rate to the scrubber. The average is defined by the total actual daily liquid injection rate to the scrubber divided by the actual daily hours of operation while sludge is being charged. A day shall be defined from 12:00 am to 11:59 pm.
 - C. For the WESP (**ID No. CD-02**), the average daily power input measured on the secondary side of the transformer. The average is defined by the sum of the product of the voltage readings times amperage, while sludge is being charged, divided by the number of power input readings performed each day. A day shall be defined from 12:00 am to 11:59 pm.
 - D. The date, time and results of inspections and maintenance performed on the conditioner, packed tower scrubber and WESP; and
 - E. Any variance from the manufacturer's recommendations and corrections made.
- iv. **Reporting** - As required under 40 CFR 60.155(c) and 40 CFR 503.48, the Permittee shall submit the following control device monitoring parameters by February 19th and August 1 of each calendar year for the preceding six-month period. In addition, all instances of deviations from the requirements of this permit must be clearly identified.
- A. For the conditioning system (**ID No. CD-04**), the monthly minimum average daily water flow rate to the quencher and cooler. The average is defined by the total actual daily wet water flow rate to the quencher and cooler divided by the actual daily hours of operation while sludge is being charged. A day shall be defined from 12:00 am to 11:59 pm.
 - B. For the packed tower scrubber (**ID No. CD-06**), the monthly minimum average daily liquid injection rate to the scrubber. The average is defined by the total actual daily wet water flow rate to the scrubber divided by the actual daily hours of operation while sludge is being charged. A day shall be defined from 12:00 am to 11:59 pm.
 - C. For the WESP (**ID No. CD-02**), the monthly minimum average daily voltage measured on the secondary side of the transformer. The average is defined by the sum of the voltage readings, while sludge is being charged, divided by the number of voltage readings performed each day. A day shall be defined from 12:00 am to 11:59 pm.

Monitoring [§60.153]

- e. The following monitoring requirements shall apply where the particulate emission rate measured during the performance test is less than or equal to 0.75 pounds per ton of dry sludge. The Permittee shall calibrate, maintain, and operate the following monitoring devices each of which will have a certified accuracy of +/- 5 percent over its operating range:
 - i. Device to be used to determine either the mass or volume of sludge charged to the incinerator.
 - ii. Device that continuously measures and records the oxygen content of the incinerator exhaust gas. The device shall be calibrated according to methods prescribed by the manufacturer at least once each 24-hour operating period.
 - iii. Devices to measure the temperature at every hearth in multiple hearth furnaces. A minimum of one thermocouple shall be installed in each hearth in the colling and drying zones and two in each hearth in the combustion zone.
 - iv. Device to measure the fuel flow to the incinerator.
- If monitoring is not performed, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Recordkeeping [§60.153]

- f. The following recordkeeping requirements shall apply where the particulate emission rate measured during the performance test is less than or equal to 0.75 pounds per ton of dry sludge:
 - i. The Permittee shall be required to maintain a record of the measured oxygen content of the incinerator exhaust gas.
 - ii. The Permittee shall maintain records of control device operation measurements as specified in the plan approved under 40 CFR 60.153(e) and identified under 40 CFR part 503 Subpart E.
 - iii. Records shall be maintained for a minimum of two years.

Reporting [§60.155]

- g. Submit semiannual reports to the Regional Supervisor, DAQ, by January 30th and July 30th of each year that include a summary of the following when the particulate emission rate measured during the performance test is less than or equal to 0.75 pounds per ton of dry sludge:
- A record of average oxygen content in the incinerator exhaust gas for each period of 1-hour duration or more which exceeds the average oxygen content measured during the most recent performance test by more than three (3) percent as measured when the sewage sludge incinerator is being charge and is in a steady state condition.
 - A record of the control device operation measurements as specified in the plan approved under 40 CFR 60.153(e) and identified under 40 CFR part 503 Subpart E.

4. 15A NCAC 02D .1110: NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS SUBPARTS C AND E

For the sewage sludge multiple hearth incinerator (22.25 feet in diameter, with a maximum average permitted charging rate of 21,200 wet pounds per hour) fired by twelve (12) No. 2 fuel oil/recycled No. 2 fuel oil-fired burners (18.8 million Btu per hour total heat input rating) (**ID No. ES-01**), the Permittee shall comply with all applicable provisions, including the notification, testing, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .1110 "National Emissions Standards for Hazardous Air Pollutants" as promulgated in 40 CFR Part 61, Subpart C and Subpart E. As required by 15A NCAC 02D .1110, the following permit limits shall not be exceeded:

Affected Source	Pollutant	Emission Limit
Multiple hearth sewage sludge incinerator (ID No. ES-01)	Beryllium	0.022 pounds per 24-hour period
	Mercury	7.1 pounds per 24-hour period

5. 15A NCAC 02D .1204: SEWAGE SLUDGE AND SLUDGE INCINERATORS

For the multiple hearth sewage sludge incinerator (**ID No. ES-01**), the Permittee shall comply with all applicable provisions, including testing, reporting and recordkeeping, emission standards, and operation standards that appear in 15A NCAC 02D .1204:

a. **Emissions Standards** [15A NCAC 02D .1204(c) and (d)]

Affected Facility	Pollutant	Emissions Limit
Multiple hearth sewage sludge incinerator (ID No. ES-01)	Particulate matter	1.3 pounds per ton of dry sewage sludge input
	Visible emissions	20% opacity
	Sulfur dioxide	2.3 pounds per million Btu
	Odorous emissions	As per 15A NCAC 02D .1806
	Hydrogen chloride	4 pounds per hour
	Mercury	As per 15A NCAC 02D .1110
	Beryllium	
	Toxic air pollutants	As per 15A NCAC 02D .1100
	Monthly average total hydrocarbon concentration	100 parts per million (volumetric basis, corrected to 7% oxygen and 0% moisture)

b. **Other metals (in sewage sludge fed to the incinerator)** [40 CFR 503.43(c) and (d)]

Pollutant	Maximum Average Daily Concentration (mg/kg)
Lead	12,733
Arsenic	2,928
Cadmium	2,073
Chromium	4,074
Nickel	509,337

- c. The average daily maximum sewage sludge combustion temperature in the multiple hearth sewage sludge incinerator (**ID No. ES-01**) shall not exceed 1,715 °F. The temperature in the combustion zone of the incinerator shall not be less than 1,200 °F.
- d. The pressure drop of the packed bed in the packed tower scrubber (**ID No. CD-06**) shall be at least 0.35 inches of water column and the liquid injection rate of the packed tower scrubber shall be at least 155 gallons per minute while sewage sludge is charged into the multiple hearth sewage sludge incinerator.
 ***Please note that these values for pressure drop and liquid injection rate were established during the performance testing conducted on March 15-16, 2016, required to be conducted pursuant to the condition for 40 CFR 62 Subpart LLL. The results from the most recently completed performance testing shall be used to determine compliance for these operation limits.

Monitoring

- e. For the multiple hearth sewage sludge incinerator (**ID No. ES-01**), the Permittee shall:
 - i. Install, calibrate, maintain and operate continuous monitoring and recording devices for the incinerator multiple hearth area temperatures and the incinerator exhaust gas total hydrocarbon concentration, oxygen content, and moisture content. The continuous emissions monitoring devices for total hydrocarbon concentration shall be certified in accordance with the appropriate performance specifications in 40 CFR Part 60, Appendix B.
 - ii. Monitor the beryllium and mercury concentrations in the sewage sludge charged to the incinerator as frequently as required by 40 CFR Part 61, but in no case less than once per year.
 - iii. Install, calibrate, maintain and operate continuous monitoring and recording devices for the pressure drop and liquid injection rate of the packed tower scrubber (**ID No. CD-06**).
 - iv. Monitor the lead, arsenic, cadmium, chromium and nickel concentrations in the sewage sludge charged into the incinerator as frequently as required by 40 CFR 503.46(a)(2) and (3).

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1204 if monitoring and recordkeeping is not performed.

Recordkeeping

- f. In accordance with 40 CFR 503.47 and 15A NCAC 02D .1204(f), the Permittee shall maintain records sufficient to demonstrate compliance with conditions 2.1.A.5.a through 2.1.A.5.e for at least 5 years.

Reporting

- g. In accordance with 40 CFR 503.48 and 15A NCAC 02D .1204(f), the Permittee shall submit to the Regional Supervisor, DAQ, in writing on or before February 19th of each year, a summary report of:
 - i. The concentrations of lead, arsenic, cadmium, chromium and nickel in the sewage sludge charged into the incinerator during the previous calendar year.
 - ii. The monthly average concentration of total hydrocarbons in the exhaust gas of the incinerator (**ID No. ES-01**) in parts per million on a volume basis, corrected to 0% moisture and 7% oxygen, during the previous calendar year.
 - iii. Information that indicates the requirements in the National Emission Standard for beryllium in 40 CFR Part 61 Subpart C and mercury in 40 CFR Part 61 Subpart E are met.
 - iv. Those periods of duration when the average daily liquid injection flow rate of the packed tower scrubber (**ID No. CD-06**) is less than 155 gallons per minute while sewage sludge is charged into the sewage sludge incinerator during the previous calendar year.
 - v. Those periods of duration when the average daily pressure drop of the packed tower scrubber (**ID No. CD-6**) is less than 0.35 inches of water column during the previous calendar year.
 - vi. Those periods of duration when the average daily combustion temperature in the sewage sludge incinerator (**ID No. ES-01**) exceeds 1,715°F or the minimum temperature in the combustor zone of the incinerator (**ID No. ES-01**) falls below 1,200 °F while sewage sludge is charged during the previous calendar year.

6. 15A NCAC 02Q .0508: PERMIT CONTENT – INCINERATION OF OFF-SITE SEWAGE SLUDGE

As requested by the Permittee, sewage sludge generated off-site may be incinerated, provided, all limitations and requirements of this permit plus the following monitoring, recordkeeping, and reporting requirements are met:

Monitoring

- a. All off-site sludge shall be monitored for the following parameters:
 - i. Mass or volume of sludge received.
 - ii. Once per year, for each off-site facility's sludge, monitor the concentrations of beryllium and mercury from the

sewage sludge fed to the incinerator as required by 40 CFR 503.46(a)(1). Sampling and monitoring for mercury shall be per 40 CFR 61.54.

- iii. Once per year, for each off-site facility's sludge, monitor the concentrations of arsenic, cadmium, chromium, lead, and nickel in the sewage sludge fed to the incinerator as required by 40 CFR 503.46(a)(2).

Recordkeeping

- b. The results of the monitoring shall be maintained in a log book (written or electronic form), kept on site, and made available to an authorized representative upon request. The log book shall record the following:
 - i. Date and time of actions;
 - ii. Name and address of facility from which sewage sludge is received;
 - iii. Wet and equivalent dry-tons of sewage sludge received; and
 - iv. Concentrations of beryllium, mercury, arsenic, cadmium, chromium, lead, and nickel in the sewage sludge fed in milligrams per kilogram of total solids (dry weight basis).

Reporting

- c. On or before February 19th of each year submit to the Regional Supervisor the following for the previous calendar year:
 - i. Mass or volume of sludge received;
 - ii. Name and address of facility from which sewage sludge is received;
 - iii. Concentrations of beryllium, mercury, arsenic, cadmium, chromium, lead, and nickel in the sewage sludge fed to the incinerator in milligrams per kilogram of total solids (dry weight basis).
 - iv. All instances of deviations from the requirements of this permit must be clearly defined.

7. 40 CFR Part 503, SUBPART E – STANDARDS FOR THE USE OR DISPOSAL OF SEWAGE SLUDGE: INCINERATION

For the sewage sludge incinerator (**ID No. ES-01**), the Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in 40 CFR Part 503, Subpart E indicated below.

Emissions of Lead

- a. The average daily lead concentration in the sewage sludge fed into the multiple hearth sewage sludge incinerator (**ID No. ES-01**) shall not exceed the maximum concentration calculated using the equation found in 40 CFR 503.43(c).

Emissions of Arsenic, Cadmium, Chromium, and Nickel

- b. The average daily concentrations of arsenic, cadmium, chromium and nickel in the sewage sludge fed into the multiple hearth sewage sludge incinerator (**ID No. ES-01**) shall not exceed the maximum concentration calculated using the equation found in 40 CFR 503.43(d).

Management Practices

- c. As required by 40 CFR 503.45, the Permittee shall follow the following management practices:
 - i. The Permittee shall install, calibrate, operate, and maintain continuous monitoring and recording devices for the total hydrocarbon concentrations, oxygen concentration, and moisture content of the exhaust gas and the combustion temperature of the multiple hearth sewage sludge incinerator (**ID No. ES-01**).
 - ii. The Permittee shall not operate the multiple hearth sewage sludge incinerator (**ID No. ES-01**) such that the combustion temperatures exceed the combustion temperatures achieved during the performance testing by more than 20%.
 - iii. The monitoring and recording devices and the control devices installed on the multiple hearth sewage sludge incinerator (**ID No. ES-01**) to comply with this Subpart must be appropriate for the type of incinerator. The operating parameters of the control device must be adequate to indicate proper performance of the control device. The operation of the control device must not violate the control device requirements of 40 CFR Part 60, Subpart O.

Continuous Emission Monitoring (CEM) Quality Assurance Program

- d. Pursuant to 15A NCAC 02D .0613 "Quality Assurance Program," the Permittee shall develop and implement a written quality assurance program containing information required by 40 CFR Part 60, Appendix F, Section 3, Quality Assurance Procedures.

i. **CEM Reporting**

The Permittee shall submit semiannually an excess emissions and monitoring systems summary report. The report shall be calculated on a quarterly basis in a format as provided by the Director. The report shall include any quality assurance assessments, as stated in the quality assurance program, and shall be submitted by July 30 for the period between January 1 and June 30 and by January 30 for the period between July 1 and December 31 of each year. [15A NCAC 02Q .0508(f)]

Recordkeeping

e. As required by 40 CFR 503.47, the following recordkeeping requirements shall be followed:

- i. Maintain the following records for a period of five (5) years from the date of recording. This information shall be maintained on site and made available to DAQ personnel upon request.
 - A. The concentration of lead, arsenic, cadmium, chromium, and nickel in the sewage sludge fed to the sewage sludge incinerator.
 - B. The total hydrocarbons concentrations in the exit gas from the sewage sludge incinerator stack.
 - C. Information that indicates the requirements in the National Emission Standard for beryllium in 40 CFR Part 61 Subpart C are met.
 - D. Information that indicates the requirements in the National Emission Standard for mercury in 40 CFR Part 61 Subpart E are met.
 - E. The operating combustion temperatures for the sewage sludge incinerator.
 - F. Values for the air pollution control device operating parameters.
 - G. The oxygen concentration and information used to measure moisture content in the exit gas from the sewage sludge incinerator stack.
 - H. The sewage sludge feed rate.
 - I. The stack height for the sewage sludge incinerator.
 - J. The dispersion factor for the site where the sewage sludge incinerator is located.
 - K. The control efficiency for lead, arsenic, cadmium, chromium, and nickel for each sewage sludge incinerator.
 - L. The risk specific concentration for chromium calculated using equation (6) of 40 CFR 503.43, if applicable.
 - M. A calibration and maintenance log for the instruments used to measure the oxygen concentration in the exit gas from the sewage sludge incinerator stack, the information needed to determine moisture content in the exit gas, and the combustion temperatures.

Reporting

f. As required by 40 CFR 503.48 on or before February 19th of each year, the Permittee shall submit to the Regional Supervisor, Division of Air Quality, the following information:

- i. The concentration of lead, arsenic, cadmium, chromium, and nickel in the sewage sludge fed to the sewage sludge incinerator.
- ii. Information that indicates the requirements in the National Emission Standard for beryllium in 40 CFR Part 61 Subpart C are met.
- iii. Information that indicates the requirements in the National Emission Standard for mercury in 40 CFR Part 61 Subpart E are met.
- iv. The operating combustion temperatures for the sewage sludge incinerator.
- v. Values for the air pollution control device operating parameters.
- vi. The oxygen concentration and information used to measure moisture content in the exit gas from the sewage sludge incinerator stack.

8. 40 CFR 62 SUBPART LLL – FEDERAL PLAN REQUIREMENTS FOR SEWAGE SLUDGE INCINERATION UNITS CONSTRUCTED ON OR BEFORE OCTOBER 14, 2010 “Federally-Enforceable Only”

- a. For the sewage sludge multiple hearth incinerator (**ID Nos. ES-01**), the Permittee shall comply by March 21, 2016, with all applicable provisions, including emission standards, monitoring and reporting requirements, maintenance requirements, notification and recordkeeping requirements, performance test requirements, test method and procedural provisions, and any other provisions, in accordance with 40 CFR 62 Subpart LLL. This condition is “Federally-Enforceable Only”.

Notifications [40 CFR §62.15885, §62.15890, §62.15990]

- b. A notification of achievement of compliance must be submitted to the Administrator no later than 10 business days after the compliance date, March 21, 2016, and shall include the following:
 - i. Notification that the final control plan has been submitted and final compliance has been achieved;
 - ii. Any items required to be submitted with the final control plan and final compliance; and
 - iii. Signature of the owner or operator of the sewage sludge incinerator (SSI) unit.
- c. Submittal of a control plan must satisfy the following two requirements:
 - i. Submit the final control plan to the EPA regional office and permitting authority. The control plan must include:
 - 1. A description of the devices for air pollution control and process changes used to comply with the emission limits and standards and other requirements of this subpart;
 - 2. The type(s) of waste to be burned, if waste other than sewage sludge is to be burned in the unit;
 - 3. The maximum design sewage sludge burning capacity; and
 - 4. A petition for site-specific operating limits under §62.15965, if applicable.
 - ii. Maintain an onsite copy of the final control plan.

Operator Training and Qualification [40 CFR §62.15920]

- d. An SSI unit cannot be operated unless a fully trained and qualified SSI unit operator is available, either at the facility or can be at the facility within 1 hour. The trained and qualified SSI unit operator may operate the SSI unit directly or be the direct supervisor of one or more other plant personnel who operate the unit. If all qualified SSI unit operators are temporarily unavailable, the procedures in §62.15945 must be followed.

Emission Limits, Emission Standards and Operating Limits and Requirements

- e. The following emissions limits and standards must be met by the final compliance date, March 21, 2016, or upon startup of an SSI that has been out of service. These limits and standards apply at all times the unit is operating and during periods of malfunction. The limits and standards also apply to emissions from a bypass stack or vent while sewage sludge is in the combustion chamber (i.e., until the sewage sludge feed to the combustor has been cut off for a period of time not less than the sewage sludge incineration residence time). (40 CFR §62.15955 and Table 3 (MHI) to Subpart LLL of Part 62)

Air Pollutant	Emission Limit for an Existing Multiple Hearth SSI ¹
Particulate Matter	80 mg/dscm
Hydrogen Chloride	1.2 ppm/dry volume
Carbon Monoxide	3,800 ppm/dry volume
Dioxins/furans (total mass basis) ² or Dioxins/furans (toxic equivalency basis)	5.0 ng/dscm Or 0.32 ng/dscm
Mercury	0.28 mg/dscm
Nitrogen Oxides	220 ppm/dry volume
Sulfur Dioxide	26 ppm/dry volume
Cadmium	0.095 mg/dscm
Lead	0.30 mg/dscm
Fugitive Emissions from Ash Handling	Visible emissions from combustion ash and from ash conveying system for no more than 5 percent of any compliance test hourly observation period.

¹ All emission limits are measured at 7-percent oxygen, dry basis at standard conditions.

² You have the option to comply with either the dioxin/furan emission limit on a total mass basis or the dioxin/furan emission limit on a toxic equivalency basis.

- f. The following operating limits and requirements for SSIs must be met to maintain compliance. The operating limits apply at all times that sewage sludge is in the combustion chamber (i.e., until the sewage sludge feed to the combustor has been cut off for a period of time not less than the sewage sludge incineration residence time). (40 CFR §62.15960 and Table 4 to Subpart LLL of Part 62)
 - i. Site-specific minimum operating temperature of the combustion chamber or afterburner temperature established through initial performance testing;

- ii. Site-specific minimum pressure drop across each scrubber, minimum flow rate of scrubber liquid, and minimum pH of scrubber liquid established through initial performance testing;
- iii. For SSIs with fabric filters to comply with emission limits, a bag leak detection system must be installed and operated such that the alarm does not sound more than 5% of the operating time during a 6-month period;
- iv. Meet the operating limits in the site-specific fugitive emission monitoring plan as specified in §62.15995(d);
- v. Monitor the feed rate and moisture content of the sewage sludge fed to the SSI by implementing the following:
 - 1. Continuously monitor the sewage sludge feed rate and calculate a daily average for all hours of operation during each 24-hour period. Keep a record of the daily average feed rate, as specified in §62.16025(f)(3)(ii); and
 - 2. Take at least one grab sample per day of the sewage sludge fed to the incinerator. Calculate a daily average for the grab samples if more than one grab sample is taken per day. Keep a record of the daily average moisture content, as specified in §62.16025(f)(3)(ii).

Initial Compliance Requirements (40 CFR §62.15980, §62.15985, §62.15990, §62.15995)

- g. Initial compliance with the emission limits and standards listed above in Section e can be demonstrated in one of two ways.
 - i. Conduct a performance test as required in 40 CFR §60.8. It must be demonstrated that the SSI unit meets the emission limits and standards specified in Table 3 (MHI) Of Federal Plan Subpart LLL for PM, HCl, CO, dioxins/furans (total mass basis or toxic equivalency basis), Hg, NO_x, SO₂, Cd, Pb, and fugitive emissions from ash handling. The initial performance test must be conducted using the test methods, averaging methods, and minimum sampling volumes or durations specified in Table 3 (MHI) and according to the testing, monitoring, and calibration requirements specified in §62.16015(a). A facility may use the results from a performance test conducted within the two previous years if it was conducted under the same conditions and demonstrated compliance with the emission limits and standards in Table 3 (MHI), provided no process changes have been made since that performance test was conducted. OR
 - ii. Demonstrate initial compliance using a continuous emissions monitoring system or continuous automated sampling system as specified in §62.15980.
 - iii. To demonstrate initial compliance with the dioxins/furans toxic equivalency emission limit, use the following:
 - 1. Measure the concentration of each dioxin/furan tetra- through octachlorinated-isomer emitted using EPA Method 23 at 40 CFR part 60, appendix A-7.
 - 2. Multiply the concentration of each dioxin/furan (tetra- through octachlorinated) isomer by its corresponding toxic equivalency factor specified in Table 5 of this subpart.
 - 3. Sum the products to obtain the total concentration of dioxins/furans emitted in terms of toxic equivalency.
 - iv. Submit an initial compliance report, as specified in §62.16030(b)
- h. Site-specific operating limits specified in Section f must be established during your initial performance test as required in §62.15980.
- i. An initial air pollutant control device inspection must be conducted by the final compliance date. For air pollution control devices installed after the compliance date, an air pollution control device inspection must be conducted within 60 days after installation of the control device. All necessary repairs must be completed within 10 operating days following the air pollution control device inspection unless approval from the Administrator is given to establish a date whereby all necessary repairs of the SSI unit must be completed.
- j. A site-specific monitoring plan for continuous monitoring, bag leak detection, and ash handling systems must be developed in accordance to the requirements of §62.15995.

Continuous Compliance Requirements (40 CFR §62.16000)

- k. Continuous compliance with the emission limits and standards in Table 3 (MHI) shall be demonstrated using either performance testing or the use of a continuous monitoring system.
 - i. Annual performance testing must be conducted for each pollutant (between 11 and 13 calendar months following the previous performance test)
 - ii. A repeat performance test may be conducted at any time to establish new values for the operating limits to apply from that point forward.
 - iii. A performance test must be repeated within 60 days of a process change, as defined in §62.16045.
 - iv. Performance testing can be conducted less often, as specified in §62.16000(a)(3).
 - v. Rules for demonstrating continuous compliance with a continuous monitoring system are specified in §62.16000(b).

- l. Continuous compliance with site-specific operating limits shall be achieved through continuously monitoring the operating parameters in accordance with §62.16005.
- m. An annual air pollution control device inspection shall be conducted no later than 12 months following the previous annual air pollution control device inspection. All necessary repairs must be completed within 10 operating days following the air pollution control device inspection unless approval from the Administrator is given to establish a date whereby all necessary repairs of the SSI unit must be completed.
- n. The performance testing, monitoring, and calibration requirements for compliance with the emission limits and standards are specified in 40 CFR §62.16015 and 40 CFR §62.16020.

Recordkeeping and Reporting (40 CFR §62.16025, §62.16030)

- o. The following records shall be maintained onsite for a period of at least 5 years.
 - i. Calendar date of each record;
 - ii. Final control plan and associated notifications;
 - iii. Operator training – documentation of training procedures and information, records showing names of SSI unit operators and other plant personnel who have completed training, and records showing periods when no qualified operators were accessible in accordance with §62.16025(c)(3) and (c)(4).;
 - iv. Air pollution control device initial and annual inspections;
 - v. Performance test reports including the initial, annual, and any subsequent test reports, including calculations. Maintain a record of the hourly dry sludge feed rate measured during performance test runs;
 - vi. Continuous monitoring data as specified in §62.16025(f);
 - vii. Deviation reports;
 - viii. Equipment specifications and operations and maintenance requirements;
 - ix. Inspections, calibrations and validation checks of monitoring devices;
 - x. Monitoring plan and performance evaluations for continuous monitoring systems;
 - xi. Less frequent testing;
 - xii. Use of bypass stack; and
 - xiii. Records of malfunctions.
- p. The following reporting requirements shall be submitted to the Administrator. Table 6 of 40 CFR 62 Subpart LLL provides a summary of reporting requirements as well.
 - i. Final control plan and final compliance report no later than 10 business days after the compliance date;
 - ii. Initial compliance report no later than 60 days following the initial performance test;
 - iii. Annual compliance report no later than 12 months following the submission of the initial compliance report. Subsequent annual compliance reports must be submitted no more than 12 months following the previous annual compliance report;
 - iv. Deviations reports as specified in §62.16030(d);
 - v. Qualified operation deviation reports as specified in §62.16030(e);
 - vi. Notification of force majeure;
 - vii. Other notifications:
 - 1. Notify the Administrator 1 month before starting or stopping use of a continuous monitoring system for determining compliance with any emission limit.
 - 2. Notify the Administrator 30 days prior to any performance test, to afford the Administrator the opportunity to have an observer present.
 - 3. Notify the Administrator at least 7 days prior to the date of a reschedule performance test for which notification was previously made.

B. One No. 2 fuel oil-fired emergency generator (2,000 kW, 20.16 million Btu per hour maximum heat input, ID No. ES-G-1)

The following provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Hazardous air pollutants	Purchase engine certified to meet the applicable engine emission limits	15A NCAC 02D .1111 40 CFR Part 63, Subpart ZZZZ
CO SO2 PM10	250 tons per year See Section 2.2 A	15A NCAC 02Q .0317 PSD Avoidance

1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from the emergency generator (**ID. No. ES-G-1**) shall not exceed **2.3 pounds per million Btu heat input**. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516]

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section **2.1 B.1.a.** above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping is required for sulfur dioxide emissions from burning No. 2 fuel oil in this emergency generator.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from the emergency generator (**ID. No. ES-G-1**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521 (d)]

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in **Section 2.1 B.2.a.** above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of No. 2 fuel oil in this emergency generator.

3. 15A NCAC 02D .1111 MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY [40 CFR 63 SUBPART ZZZZ]

Applicability [40 CFR 63.6585, 63.6590(a)(1)(iii)]

- a. For the emergency generator (**ID No. ES-G-1**) (existing stationary RICE located at an area source of HAP emissions), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, "Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines" and Subpart A "General Provisions."

Definitions and Nomenclature

- b. For the purposes of this permit condition, the definitions and nomenclature contained in 40 CFR 63.6675 shall apply.

Applicability Date [40 CFR 63.6595(a)(1)]

- c. The Permittee shall comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013.

Notifications [40 CFR 63.6645(a)(5)]

- d. The Permittee has no notification requirements.

General Provisions [40 CFR 63.6665]

- e. The Permittee shall comply with the General Provisions as applicable pursuant to Table 8 of 40 CFR 63 Subpart ZZZZ

Operating and Maintenance Requirements [15A NCAC 02Q .0508(b)]

- f. During periods of startup of the IC engine, the Permittee shall minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR 63.6603(a), Table 2d and 63.6625(h)]
- g. Except during periods of startup of the IC engine, the Permittee shall:
 - i. Change oil and filter every 500 hours of operation or annually, whichever comes first;
 - ii. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and
 - iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary[40 CFR 63.6603(a), Table 2d]
- h. The Permittee shall have the option to utilize the oil analysis program as described in 40 CFR 63.6625(i) in order to extend the specified oil change requirement in **Section 2.1 B.3.g.** [40 CFR 63.6603(a), Table 2, 63.6625(i)]
- i. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in **Section 2.1 B.3.g.**, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. [40 CFR 63.6603(a), Table 2d]
- j. The permittee shall be in compliance with the emission limitations, operating limitations and other requirements that apply at all times. [40 CFR 63.6605(a)]
- k. The Permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]
- l. The Permittee shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e) and 63.6640(a), Table 6]
- m. In order for the engine to be considered an emergency stationary RICE under this condition, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (1) through (3) below, is prohibited.

- (1) There is no time limit on the use of emergency stationary RICE in emergency situations.
- (2) The Permittee may emergency stationary RICE for any combination of the purposes specified in paragraph (2)(i) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (3) below counts as part of the 100 hours per calendar year allowed by this paragraph (2).
 - (i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
- (3) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph (m)(2) above. Except as provided in paragraph (3)(i) below, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
 - (i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
 - (A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
 - (B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
 - (C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
 - (D) The power is provided only to the facility itself or to support the local transmission and distribution system.
 - (E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[40 CFR 63.6640(f)(1), (2) and (4)]

- n. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in **Section 2.1 B.3 e through m** are not met.

Fuel Requirements [15A NCAC 02Q .0508(f), 40 CFR 63.6604(b)]

- o. Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates for the purpose specified in **Section 2.1 B.3.m(3)(i)** above, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

Monitoring [15A NCAC 02Q .0508(f)]

- p. The Permittee shall install a non-resettable hour meter on the IC engine if one is not already installed. [40 CFR 63.6625(f)]

Recordkeeping [15A NCAC 02Q .0508(f)]

- q. The Permittee shall keep the following:
 - i. A copy of each report that you submitted to comply with this subpart, including all supporting documentation, according to the requirement in 40 CFR 63.10(b)(2)(xiv)[40 CFR 63.6655(a)(1)];

- ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment [40 CFR 63.6655(a)(2)];
 - iii. Records of all required maintenance performed on the air pollution control and monitoring equipment [40 CFR 63.6655(a)(4)];
 - iv. Records of actions taken during periods of malfunction to minimize emissions in accordance with **Section 2.1 B.3.k**, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [40 CFR 63.6655(a)(5)];
 - v. Records of the maintenance conducted on the RICE pursuant to **Section 2.1 B.3.l** [40 CFR 63.6655(d) and (e)];
 - vi. Records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The Permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. [40 CFR 63.6655(f)]
 - (A) If the engine is used for the purposes specified in **Section 2.1 B.3(3)(i)** above, the owner or operator must keep records of the notification of the situation, and the date, start time, and end time of engine operation for these purposes. [40 CFR 63.6655(f)]
 - q. The Permittee shall keep each record in a form suitable and readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). [40 CFR 63.6660(a), (b), (c)]
 - r. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in **Section 2.1 B.3 o through q** are not met.
- Reporting** [15A NCAC 02Q .0508(f)]
- s. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of noncompliance must be clearly identified. [40 CFR 63.6640(b), (e) and 63.6650(f)]
 - t. The summary report shall also include any reporting required under **Section 2.1 B.3.i**, as necessary. [40 CFR 63.6603(a), Table 2d]
 - u. If the Permittee owns or operates an emergency stationary RICE with a site rating of more than 100 brake HP that operates for the purpose specified in **Section 2.1 B.3.m(3)(i)** above, the Permittee shall submit an annual report according to the requirements at 40 CFR 63.6650(h). This report must be submitted to the Regional Supervisor and the EPA. [40 CFR 63.6650(h)]
 - v. The Permittee shall be deemed in noncompliance with the reporting requirements of 15A NCAC 02D .1111 if the requirements in **Section 2.1 B.3.s through u** are not met.

2.2- Multiple Emission Sources and Specific Limitations and Conditions

- One sewage sludge multiple hearth incinerator (22.25 feet in diameter, with a maximum average permitted charging rate of 21,200 wet pounds per hour) fired by twelve (12) No. 2 fuel oil/recycled No. 2 fuel oil-fired burners (18.8 million Btu per hour total heat input rating)) (ID No. ES-01) controlled by No. 2 fuel oil-fired afterburner (ID No. CD-02, 7.77 million Btu per hour maximum burner rating), conditioning system consisting of a spray quencher and two-tray impingement cooler (ID No. CD-04), packed tower scrubber (ID No. CD-06, 155 gallons per minute minimum liquid injection rate and a minimum pH of 4.67), and wet electrostatic precipitator (ID No. CD-02, 2,439 square feet of collector plate area)
- One No. 2 fuel oil-fired emergency generators (2,000 kW, 20.16 million Btu per hour maximum heat input, ID No. ES-G-1)

A. 15A NCAC 2Q .0317 AVOIDANCE CONDITION for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION – CO, SO₂, AND PM₁₀

1. In order to avoid applicability of 15A NCAC 02D .0530(g) for major sources and modifications, all emission sources combined shall emit to the atmosphere less than 250 tons each of carbon monoxide, sulfur dioxide, and PM₁₀, total per consecutive 12-month period.

Testing [15A NCAC 02Q .0501 (c)(4)]

2. If emission testing is required, the Permittee shall perform such testing in accordance with 15A NCAC 02D .0501(c)(4) and General Condition JJ. If the results of this test are above the limit given in **Section 2.2 A. 1.** above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Recordkeeping [15A NCAC 02Q .0508 (f)]

3. The Permittee shall keep monthly records of the amount of total hours of operation for the No. 2 fuel oil-fired emergency generator (**ID No. ES-G-1**) and the amounts of dry sludge combusted in the multiple hearth sewage sludge incinerator (**ID No. ES-01**). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if this monitoring is not conducted.

Reporting [15A NCAC 02Q .0508 (f)]

5. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
 - a. The monthly hours of operation of the emergency generator, the monthly amount of dry sludge combusted in the multiple hearth sewage sludge incinerator, and monthly carbon monoxide, sulfur dioxide, and PM₁₀ emissions (in tons) for the previous 17 months. The hours of operation, the amount of dry sludge combusted, and all required emissions shall be calculated for each of the 12-month periods over the previous 17 months.

SECTION 3 - GENERAL CONDITIONS (version 4.0 12/17/15)

This section describes terms and conditions applicable to this Title V facility.

A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]

1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]

The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]

In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]

Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]

The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY

The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. **Permit Modifications**

1. Administrative Permit Amendments [15A NCAC 02Q .0514]

The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.

2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]

The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.

3. Minor Permit Modifications [15A NCAC 02Q .0515]

The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.

4. Significant Permit Modifications [15A NCAC 02Q .0516]

The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.

5. Reopening for Cause [15A NCAC 02Q .0517]

The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. **Changes Not Requiring Permit Modifications**

1. Reporting Requirements

Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:

- a. changes in the information submitted in the application;
- b. changes that modify equipment or processes; or
- c. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]

- a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
- b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
 - i. the changes are not a modification under Title I of the Federal Clean Air Act;
 - ii. the changes do not cause the allowable emissions under the permit to be exceeded;
 - iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
 - iv. the Permittee shall attach the notice to the relevant permit.
- c. The written notification shall include:
 - i. a description of the change;
 - ii. the date on which the change will occur;
 - iii. any change in emissions; and
 - iv. any permit term or condition that is no longer applicable as a result of the change.
- d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.

3. Off Permit Changes [15A NCAC 02Q .0523(b)]

The Permittee may make changes in the operation or emissions without revising the permit if:

- a. the change affects only insignificant activities and the activities remain insignificant after the change; or
- b. the change is not covered under any applicable requirement.

4. Emissions Trading [15A NCAC 02Q .0523(c)]

To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

- I.A. Reporting Requirements for Excess Emissions and Permit Deviations** [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]
- "Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. *(Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.)*

"Deviations" - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

Excess Emissions

1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
 - a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
 - i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
 - name and location of the facility;
 - nature and cause of the malfunction or breakdown;
 - time when the malfunction or breakdown is first observed;
 - expected duration; and
 - estimated rate of emissions;
 - ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
 - iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

Permit Deviations

3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
 - a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.B. Other Requirements under 15A NCAC 02D .0535

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

J. Emergency Provisions [40 CFR 70.6(g)]

The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.

3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
 - a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
 - b. the permitted facility was at the time being properly operated;
 - c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
 - d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. **Permit Renewal** [15A NCAC 02Q .0508(e) and 02Q .0513(b)]

This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least nine months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]

1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]

The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall

comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent; and
4. the method(s) used for determining the compliance status of the source during the certification period.

Q. Certification by Responsible Official [15A NCAC 02Q .0520]

A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. Permit Shield for Applicable Requirements [15A NCAC 02Q .0512]

1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
 - a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
 - b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
 - c. the applicable requirements under Title IV; or
 - d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. Termination, Modification, and Revocation of the Permit [15A NCAC 02Q .0519]

The Director may terminate, modify, or revoke and reissue this permit if:

1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. Insignificant Activities [15A NCAC 02Q .0503]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. Property Rights [15A NCAC 02Q .0508(i)(8)]

This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. Inspection and Entry [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]

1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
 - a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
 - b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
 - c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.

2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]

1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q .0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History** [15A NCAC 02Q .0507(d)(4)]

The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(e)]

1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR § 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]

If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. **Prevention of Accidental Releases General Duty Clause - Section 112(r)(1)** – FEDERALLY-ENFORCEABLE ONLY

Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. **Title IV Allowances** [15A NCAC 02Q .0508(i)(1)]

This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. **Air Pollution Emergency Episode** [15A NCAC 02D .0300]

Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. **Registration of Air Pollution Sources** [15A NCAC 02D .0202]

The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. **Ambient Air Quality Standards** [15A NCAC 02D .0501(c)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. **General Emissions Testing and Reporting Requirements** [15A NCAC 02Q .0508(i)(16)]

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
 - a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
 - i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
 - ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
 - iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
 - b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

KK. Reopening for Cause [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
 - a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
 - b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
 - c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
 - d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. Reporting Requirements for Non-Operating Equipment [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. During operation the monitoring recordkeeping and reporting requirements as prescribed by the permit shall be implemented within the monitoring period.

MM. Fugitive Dust Control Requirement [15A NCAC 02D .0540] - STATE ENFORCEABLE ONLY

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

NN. Specific Permit Modifications [15A NCAC 02Q.0501 and .0523]

1. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
 - a. a description of the change at the facility;
 - b. the date on which the change will occur;
 - c. any change in emissions; and
 - d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the

application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. **Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]

For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

ATTACHMENT

List of Acronyms

AOS	Alternate Operating Scenario
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CAIR	Clean Air Interstate Rule
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
DAQ	Division of Air Quality
DEQ	Department of Environmental Quality
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standard
OAH	Office of Administrative Hearings
PM	Particulate Matter
PM₁₀	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO₂	Sulfur Dioxide
tpy	Tons Per Year
VOC	Volatile Organic Compound